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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,835	04/13/2004	Engel Visscher	2333-45	5532
20575 7590 11/23/2007 MARGER JOHNSON & MCCOLLOM, P.C. 210 SW MORRISON STREET, SUITE 400 PORTLAND, OR 97204			EXAMINER HAGEMAN, MARK	
			ART UNIT 3653	PAPER NUMBER
			MAIL DATE 11/23/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/823,835

**Applicant(s)**

VISSCHER ET AL.

**Examiner**

Mark Hageman

**Art Unit**

3653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-10 and 20-25 is/are pending in the application.
- 4a) Of the above claim(s) 23-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-10 and 20-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10-18-2007 has been entered.

### ***Election/Restrictions***

2. Newly submitted claims 23-25 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: claims 23-25 are directed to a vacuum shaft but do not include the material separation screen structure as originally claimed. No claims were previously examined that claimed this subcombination. Furthermore claim 1 does not require the particulars of the subcombinations as claim one does not recite any vacuum members.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 23-25 withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

***Specification***

Applicant's reply failed to address the examiner objection to the specification therefore it is reiterated below. Examiner requests clarification of the unclear subject matter.

The specification is objected to under 37 CFR 1.71 for not being "in full, clear, concise, and exact terms as to enable any person skilled in the art or science to which the invention or discovery appertains, or with which it is most nearly connected, to make and use the same." Examiner questions the disclosure of the vacuum shaft system and requests clarification as to how the system works. Paragraphs 25-29 of the specification contain the subject matter in question. Examiner does not understand how the system can function as disclosed. As understood by the examiner the divider (70) is in contact with the vacuum shaft (60) and rotates therewith. If this is true Examiner does not understand how the airflow can be varied by changing the position of the divider. If the divider is stationary and the shaft rotates around it the system seems to work in the disclosed manner. This seems unlikely though as the fins (72) form a tight abutment against the inside walls of the vacuum shaft (60, para 26 lines 5+). Examiner requests clarification as to whether the divider (70) rotates with the shaft and a general description as to the functioning of the air shaft system. Examiner further requests clarification as to how the airflow is introduced into the air shaft. If the divider rotates does the air source rotate with it or is the air source stationary adjacent the rotating air shaft?

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 4 and 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 4 and 21 recite output holes that block air. This is not contained in the specification. The specification discusses a divider that separates regions of negative pressure from regions of positive pressure but does not discussed holes that block flow. Furthermore it does not make sense as it is not understood how a hole can block air?

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 3-5 and 20-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 3 and 20 includes "input holes that suck air..." This renders the claim Indefinite. How can the holes suck air? It is unclear what is meant by vacuum member. As understood by the examiner this means a hollow shaft with holes therein. This being the case it is not understood how the holes can suck air? It seems some

vacuum source is necessary for there to be an airflow and that it would be this source rather than the holes that actually provide the airflow.

Claims 4 and 21 include "output holes that block air." This is unclear and renders the claim indefinite. Similar to claims 3 and 21 it is not understood how a hole can block air. It seems more likely that the vacuum pressure is not present at these holes (due to the divider) and therefore the materials are allowed to be released from the shaft.

Claims 5 and 22 include "a divider located inside the vacuum member that separates the input holes from the output holes." This is unclear and renders the claims indefinite as it is unclear what an input hole is and what is an output hole. Consistent with the objection to specification above it is unclear how the vacuum shaft functions. Therefore it is not clear if a given hole only experiences positive or negative pressure or if it experiences periods of both as it rotates.

Furthermore relative to claims 3-5 and 20-22 it is not clear what generates the air flow as no vacuum source etc. has been claimed. Therefore it appears the claims recite a hollow shaft with holes therein that contains a divider separating some holes (input) from some other holes (output).

All claims have been treated as best understood.

### ***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 3-7, and 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,789,068 to Gilmore. Gilmore discloses multiple elongated members (19) aligned along a separation screen frame (figure 2) and configured to rotate in a direction causing materials to move along the separation screen (c1 lines 55+), the multiple elongated members having a shape and spacing so that substantially rigid materials move along the screen while non-rigid or semi-rigid pieces of the materials slide down between adjacent ones of the multiple elongated members, wherein the multiple elongated members are tubes (19) with a continuous round cross-sectional shape with a substantially smooth outside surface that extends along substantially an entire length of the elongated members (19). Examiner contends that, "the members having a shape and spacing so that substantially rigid materials move along the screen while non-rigid or semi-rigid pieces of the materials slide down between adjacent members" is functional language in that it does not provide a structural limitation to the claim, see MPEP 2114. Examiner further contends the Gilmore device is fully capable of functioning in this manner.

-Re claim 3 at least one vacuum member (22) that includes input holes (34 figure 4 and c2 lines 48+) that suck air for retaining some of the non-rigid materials (figure 1).

-Re claims 4 and 21 the vacuum member includes output holes (34, figure 4 and

c2 lines 48+) that block air for dislodging the non-rigid materials retained by the input holes (figure 1).

-Re claim 5 a divider (24) located inside the vacuum member that separates the input holes from the output holes.

- Re claim 6 including discs (18) located on at least some of the multiple elongated members.

-Re claim 7 the discs have multiple sides that maintain a substantially constant spacing with discs on adjacent multiple elongated members (figure 2). Each disc has 2 sides and the spacing between any 2 discs remains constant.

-Re claim 20 multiple elongated tubes (19) aligned along a separation screen frame (figure 2) that rotate in a direction causing material to move along the separation screen (c1 lines 55+), the multiple elongated tubes having a shape and spacing so that substantially rigid materials move along the screen while non-rigid or semi-rigid material slide down between adjacent ones of the multiple elongated members; and at least one of the multiple elongated tubes being a vacuum tube (22) that includes input holes (34, figure 4 and c2 lines 48+) that suck air for retaining some of the non-rigid materials. Examiner contends that, "the members having a shape and spacing so that substantially rigid materials move along the screen while non-rigid or semi-rigid pieces



of the materials slide down between adjacent members” is functional language in that it does not provide a structural limitation to the claim, see MPEP 2114. Examiner further contends the Gilmore device is fully capable of functioning in this manner.

-Re claim 22 a divider (24) extending substantially along an entire inside length of the vacuum tube that separates the input holes from the output holes (figure 1).

9. Claims 1 and 6-10 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,960,964 to Austin. Austin discloses multiple elongated members (16, 30 and figure 1) aligned along a separation screen frame (12) and configured to rotate in a direction causing materials to move along the separation screen (c4 lines 10+), the multiple elongated members having a shape and spacing so that substantially rigid materials move along the screen while non-rigid or semi-rigid pieces of the materials slide down between adjacent ones of the multiple elongated members, wherein the multiple elongated members are tubes (30) with a continuous round cross-sectional shape with a substantially smooth outside surface that extends along substantially an entire length of the elongated members (30 figure 2). Examiner contends that, “the members having a shape and spacing so that substantially rigid materials move along the screen while non-rigid or semi-rigid pieces of the materials slide down between adjacent members” is functional language in that it does not provide a structural

limitation to the claim, see MPEP 2114. Examiner further contends the Austin device is fully capable of functioning in this manner.

- Re claim 6 including discs (18) located on at least some of the multiple elongated members.

-Re claim 7 the discs have multiple sides that maintain a substantially constant spacing with discs on adjacent multiple elongated members (c4 lines 22+).

-Re claim 8 at least some of the discs are dual diameter discs having a primary disc with a first outside perimeter and a secondary disc with a second outside perimeter smaller than the first outside perimeter (c9 lines 15+).

-Re claim 9 the primary disc on a first one of the multiple elongated members is aligned with the secondary disc on a second adjacent one of the multiple elongated members and the secondary disc on the first one of the multiple elongated members is aligned with the primary disc on the second adjacent one of the multiple elongated members (c9 lines 15+ and figure 15).

-Re claim 10 the dual diameter discs on adjacent elongated members partially overlap (c9 lines 15+ and figure 15).

***Response to Arguments***

10. Applicant's arguments filed 10-18-2007 have been fully considered but they are not persuasive. Applicant stated, "Neither Austin nor Gilmore disclose elongated members that are tubes with a continuous round cross-sectional shape with a substantially smooth outside surface that extends along substantially an entire length of the elongated members." Examiner disagrees and contends that both Austin and Gilmore show this feature (30 and 19 respectively) as set forth above. Furthermore examiner acknowledges the removal of the words "configured to" from multiple claims. While this does change the interpretation of these claims, the language still fails to provide structural limitations. Furthermore examiner maintains that the cited references could readily function in the claimed manner.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Hageman whose telephone number is (571) 272-3027. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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MCH

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11/20/07